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ABSTRACT

Youth labor market successes and problems have roots in young people's childhood experiences. The many components of basic skills and employability skills are acquired through the educational process. Each skill has its counterpart in the expected outcomes of young people's education. Data in labor market research can be interpreted as empirical estimates of basic and employability skills. These data can be evaluated to see how various dimensions of basic and employability skills affect young people's labor market experiences. Data suggest that youth who have diplomas have acquired more knowledge than dropouts. Only a few rough estimates of the numbers of young people with deficiencies in their educational backgrounds are available. The major reason for difficulties in attempting to estimate the dimensions of the educational problem is the lack of agreement on a set of definitions for "educational deficiencies." The literature indicates that the characteristics of young people's families, the schools they attend, the areas in which they live, and youth's own attributes operate separately and in combination to affect dropout status. Research shows that although the acquisition of basic skills has a payoff in the job market, the payoff to a diploma seems to be even greater. (61 endnotes) (YLB)

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PAST IS PROLOGUE; EDUCATIONAL DEFICIENCIES AND THE YOUTH LABOR MARKET PROBLEM

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The National Commission for Employment Policy (NCEP) monograph series is dedicated to exploring important issues that influence employment and training policies and programs. This monthly publication will address a wide range of issues associated with the workplace and labor market. Research and information will be presented with the objective of enhancing public discussion concerning these issues and assisting those decisionmakers involved with the Nation's employment and training agenda.

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PAST IS PROLOGUE:
EDUCATIONAL DEFICIENCIES AND THE YOUTH LABOR MARKET PROBLEM

I. INTRODUCTION

Reducing the high rates of unemployment among youth in inner cities and rural areas has long been on the Nation's policy agenda. In recent years, the high incidence of deficiencies in basic and employability skills among these young people has joined their unemployment rates as an issue of national concern.

This paper reviews the evidence on youths' basic and employability skills and on the ways they affect the labor market experiences of young people, age 16-22. It finds that how well youth fare when they reach these ages is largely determined by their experiences before they become 16 years old. Distinguishing between youth aged 14 or 15 and those who are 16 or 17 can be misleading. Well adjusted, well educated 15 year olds are likely to become well adjusted, well educated 16 year olds. Youth with problems at age 15 can be expected to continue to have problems at age 16, 17 or 18, when they have entered the workforce.

To enhance the prospects of youth likely to be "at risk" when they enter the job market, several aspects of their education must be improved. This means addressing their deficiencies in basic skills and in knowledge about the workings of the labor market. For some, it means improving their "attitudes," attitudes which may have developed because of poor experiences inside a classroom, within their families or neighborhoods, or both. A separate, but related, goal is to reduce the school dropout rate: graduates fare better in the job market than dropouts even after taking into account differences in attitudes and levels of basic skills. For youth already out of school and "at risk," it is important to distinguish among them in terms of the types of deficiencies they have -- poor attitudes, low levels of basic skills and/or lack of a diploma.

Just as displaced workers have been found to differ in the services they require, so young people differ in the types of educational assistance they need.(1) These differences need to be taken into account if policies and programs designed to assist "at risk" youth are to be successful.

The next section defines the many components of "basic skills" and "employability skills" and relates them to the expected outcomes of the educational process. Section II also discusses ways in which information in labor market research can be interpreted as empirical estimates of basic and employability skills and what receipt of a high school diploma seems to represent. Section III presents evidence on the magnitude of educational problems among young people. It indicates likely numbers of youth with various difficulties and describes the particular characteristics of dropouts. The ways in which educational — or skill — deficiencies affect youth's labor market experiences are described in Section IV. Section V contains the summary and conclusions.

The paper is based on a review of the research on the labor market experiences of youth who do not attend college. It builds on previous literature reviews, most of which were undertaken in the late 1970s and early 1980s,(2) and concentrates on synthesizing work undertaken since that time.

II. BASIC SKILLS, EMPLOYABILITY SKILLS AND HIGH SCHOOL DIPLOMAS

The terms basic skills, employability skills, and high school diplomas are often used in discussions of youth's education and training needs. However, policy-makers, researchers and the education and training community have yet to agree on their exact definitions. The acquisition of basic skills is considered to be distinct from receipt of a high school diploma: graduates may or may not have basic skills. At the same time, there is no universal agreement on the levels of achievement that should be consistent with receipt of a diploma.

The term basic skills is used in different ways. Sometimes basic skills are defined narrowly to mean knowing how to read, write, and compute.(3) Other times, they are defined broadly, to include problem-solving skills.(4)

Employability skills seem to have several component's -- having "proper attitudes," information about the job market, and occupation-specific training. However, these several components have not been precisely defined. "Having proper attitudes" appears to include a variety of attributes -- being neatly clothed and groomed, honest, dependable, willing to work, and able to get along well with others.(5) Having information about the job market includes several items: knowing about (a) alternative occupations, their educational requirements, and the wages they offer; (b) effective methods of job search; and (c) how to behave in job interviews.(6) Occupation-specific training includes training obtained in vocational education courses while youth are still in school, and, among out of school youth, training obtained on the job, in the armed forces, in apprenticeship programs, or through federally sponsored programs, such as those funded under the Job Training Partnership Act (JTPA).(7)

Expected Outcomes of Education

Acquiring all these skills -- narrowly defined basic skills, broadly defined basic skills and employability skills -- is part of the educational process. Each skill has its counterpart in the expected outcomes of young people's education. In this context, education is defined broadly: the term represents the full process by which people learn. Education includes, but goes beyond, formal schooling. It occurs in a variety of settings: young people learn not only through their experiences in school, but also through experiences within their families, their neighborhoods, and the general environment, including through exposure to newspapers, magazines and television.

For purposes of relating basic and employability skills to the education process, it is helpful to categorize the expected outcomes of education as --

1. acquisition of reading skills;
2. acquisition of knowledge (such as math, history, spelling and grammar) gained through the use of reading skills;
3. acquisition of knowledge gained through observation of the "world around one" and through interaction with family, friends and others;
4. successful application of previously gained knowledge to new situations;
5. development of attitudes and behavior that are consistent with being productive members of the society, polity and economy.(8)

The acquisition of basic skills (narrowly defined) most closely approximates the acquisition of reading skills and of knowledge, through reading and other means -- the first three outcomes on this list. Acquiring basic skills (broadly defined) includes also the fourth outcome, which is basically the acquisition of problem-solving skills.

Acquiring employability skills means obtaining basic skills, and more. First, it also means having acquired knowledge not only in such areas as math and history, but also knowledge about the labor market. Second, it may also include having acquired some occupation-specific skills, such as that obtained through vocational education. Third, having employability skills means having developed "proper attitudes and behavior," the fifth outcome on this list.

It should be noted that receipt of a high school diploma is not listed as a separate educational outcome. Rather, it measures some -- typically unspecified -- level of achievement of <u>all</u> the goals combined. As such, receipt of a diploma is similar to the acquisition of employability skills, although employability skills may also include occupation-specific training. As a practical matter, some states have minimum basic requirements for graduation and a diploma is often a prerequisite for additional formal education and for many jobs.

Measuring Basic and Employability Skills

The labor market literature contains data that can be interpreted as empirical measures of the educational outcomes of basic and employability skills. These data can also be evaluated to see how various dimensions of basic and employability skills affect young people's labor market experiences.

There is some information that may be directly interpreted as estimates of the extent to which youth have attained a particular goal.

In this category are various measures of vocational education courses taken. Also, acquisition of narrowly defined basic skills can be measured by Armed Forces Qualifying Test (AFQT) scores and scores on prose tests (reading and interpreting prose, as in newspaper articles, magazines and books).(9)

Most of the information is more accurately described as rough indicators of the extent to which youth have attained the goals of basic and employability skills. The ways in which this type of information is interpreted here require explanation.

First, letter grades in school capture two elements of the process of education or skill acquisition. They measure the extent to which youth have acquired basic skills -- how much they know and how well they know it. In addition, among otherwise similar students, more motivated ones would be expected to have higher grades. Thus, to some extent, letter grades may also be interpreted as measures of attitudes, in this case toward learning in school.(10)

Second, delinquency and having been disciplined by school authorities may also be interpreted as indicators of the attitudes of in-school youth. (It is recognized that to some extent being disciplined in school also captures the practices of schools in the way they handle "difficult" students.) Among out-of-school youth, comparable measures include delinquency or engaging in illegal activities, and "absenteeism from work." All of these are measures of youth's actions, from which their attitudes can be inferred. It seems reasonable to state that the more a young person has engaged in delinquent behavior, been disciplined by school authorities or has unexplained absences from work, the less likely he/she is either to have the attitudes deemed proper within society as a whole or to be motivated to behave responsibly in social or work settings.(11)

Third, measures of the particular employability skill --- having knowledge about the workings of the labor market -- are imprecise. Estimates of how much youth know about different occupations have been found to proxy for young people's IQ levels and appear to have little value as indicators of their labor market knowledge.(12) More reliable indicators of youth's knowledge in this area appear to be measures of their actions. Here there is some information on how young people go about looking for work and what references they have for potential employers.(13)

Measuring a High School Diploma

While there have been many investigations of the "dropout problem," the emphasis has been on the forces that influence young people's decisions to leave school, rather than on the educational attributes of graduates versus dropouts. Still, from these examinations and from data on test scores, it is possible to compare and contrast some of the differences between graduates and dropouts. Because there is no commonly accepted standard for graduates' skills, knowledge or attitudes, the information presented here describes the achievements of graduates (who do not attend college) in relative terms -- how they compare to dropouts.(14)

Youth with diplomas have higher average levels of basic skills than dropouts, although the extent of the difference does not seem to be large. On a prose test given to a nationwide sample of 21 to 25 year olds in 1985, white and black high school graduates had an average score that was 25 points (out of 500 points) higher than white and black youth without a diploma; the average score of Hispanic graduates was almost 40 points higher than of those without a diploma.(15) Similar results have been found using other measures of basic skills, such as grades and AFQT scores.(16)

Through their actions, graduates demonstrate that they have different attitudes from those of dropouts. The two groups tend to behave differently years before they leave school and several years afterwards as well. Young men and women graduates are less likely than dropouts to have engaged in delinquent behavior during their school years.(17) After leaving school, male graduates are less likely than dropouts to engage in illegal activities and they are less likely to be discharged "for cause" by their employers. Among inner-city black young men in particular, graduates are less likely than dropouts to have unexplained absences from work.(18)

Taken together, these results suggest that youth who have diplomas have acquired more knowledge than dropouts, to some extent at least. As important, they are more likely to have socially acceptable attitudes and behavior. To the extent that employers interpret a diploma as representing both these attributes, a diploma becomes a "signalling device": a graduate will likely fare better in the job market than a dropout even if a particular dropout does not differ from a particular graduate in either knowledge or attitudes.

III. DIMENSIONS OF THE EDUCATIONAL PROBLEM

This section describes what is known about the number of youth who have deficiencies in their educational backgrounds. It also describes the characteristics of dropouts since, as the next section indicates, youth who lack diplomas are especially likely to have difficulties in the job market.

While policy-makers, employers, and education and training practitioners realize that <u>some</u> youth have deficiencies in their educational backgrounds, there are serious difficulties in attempting to estimate their numbers. A major reason for these difficulties is the lack of agreement on a set of definitions for "educational deficiencies."

The number of dropouts is typically used to estimate the dimensions of the educational problem since, in theory at least, receipt of a diploma can be easily measured -- a person either graduates or does not. In practice however, there is no one figure that is totally reliable: different data sources provide different counts of the number of dropouts in an age group.(19) A second problem with this measure of educational deficiency was noted earlier: there are several uncertainties over the meaning of a diploma.

The numbers of youth who lack basic skills, proper attitudes, or information about the job market are even more difficult to determine. While there are some published data that suggest the number who lack basic skills, information on attitudes is found only for dropouts, and there is no published information on the number who lack information about the several dimensions of the workings of the labor market described earlier.

Number Lacking Basic Skills

Test scores on reading levels offer evidence on the extent to which youth lack basic skills. There is some information on reading abilities of young people who were 21 to 25 in 1985 and some on the reading proficiencies of youth aged 9, 13, and 17 over the period 1970 to 1983.

Data for 21 to 25 year olds associate reading scores with that which would be expected of typical eleventh grade students and typical eighth grade students. Findings here indicate that 38.5 percent (about 7.7 million young people) read below average for youth in the eleventh grade and 20.2 percent (4.4 million persons) are below average for eighth graders.(20)

Lack of proficiency in reading is particularly a problem among blacks and Hispanics, according to these data. (See Diagram 1.) For example, 15 percent of white 21 to 25 year olds, but almost 30 percent of Hispanics and almost 50 percent of blacks in this age group read below the eighth grade level.

Data on the reading abilities of 9, 13, and 17 year olds associate test scores with certain levels of proficiency rather than with grade levels. Findings here indicate that almost 100 percent of 17 year olds have a "basic" level of proficiency, which is defined as "the ability to understand specific or sequentially related information."(21) A smaller proportion is proficient at the next highest reading level: 84 percent of 17 year olds read at the "intermediate" level, a level which suggests "an ability to search for specific information, interrelate ideas, and make generalizations."(22) Alternatively stated, approximately 600,000 17 year olds (16 percent) do not meet this standard.

Diagram 2 gives the proportions of white, black, and Hispanic 9, 13, and 17 year olds who read at the intermediate level over the period 1973 to 1983. As shown in this diagram, by age 9 blacks and Hispanics already lag behind whites in their reading proficiency. For example, in 1983, 22 percent of white 9 year olds were at the intermediate level, compared to 4.5 percent of blacks and Hispanics. But great strides are made between ages 9 and 13. While between 1973 and 1983 there were only small increases in the proportions of black and Hispanic 9 year olds who read at this level, sizable increases occurred among 13 year olds -- from 24 to 35 percent among blacks and from 30 to 39 percent among Hispanics.

In general, differences among white, black, and Hispanics are diminishing within all age groups. This is occurring because the percentages of "good readers" among black and Hispanic 13 and 17 year olds are increasing while the percentages among whites were approximately constant. To the extent that

these trends continue, it could be projected that over 70 percent of black and Hispanic 17 year olds (and 40 percent of the 13 year olds) will be reading at the intermediate level by the beginning of the 1990s.

Number Lacking High School Diplomas

National data indicate that the proportion of students dropping out has remained relatively steady over the past decade. (See Diagram 3.) About 15 percent of 20 to 24 year olds do not complete high school and have not received a GED after leaving school. The proportion of black 20 to 24 year olds without a diploma or GED has been declining, but still remains above the national average, at about 20 percent. The proportion of Hispanic 20 to 24 year olds without a diploma has fluctuated around 40 percent. Overall, in 1986, there were a little over 3 million 20 to 24 year olds who had not completed high school.

Age-specific dropout rates provide useful insights into these figures: they indicate at what ages different groups drop out and return to school to obtain GEDs. The dropout rate of 17 year olds measures the proportion who leave school prior to the normal school leaving age; dropout rates among 18-19 year olds measure the proportion who did not complete school at the typical graduation age; and dropout rates for youth over age 19 are the proportions who both left school and did not return to obtain either a diploma or a GED.(23)

As shown in Diagram 4, white and black youth are about equally likely to leave school prior to age 18, the typical graduation age. Among young people age 18 and older, dropout rates among blacks are higher than those of whites. At every age, Hispanic dropout rates are substantially above those of blacks and whites.

These age-specific data also permit developing rough estimates of the number of youth who are likely to be dropouts in the future. (See Diagram 5.) The 17 to 22 year olds in 1994 are currently 10 to 15 years of age; and the 17 to 22 year olds in 1997 are presently 7 to 12 years of age. These projections suggest that there will likely be 3 million dropouts among 17 to 22 year olds in 1994 if the dropout rates of the late 1970s and early 1980s prevail.(24) Of these 3 million youth, 60 percent are white; almost 25 percent, Hispanic; and a little under 20 percent, black.

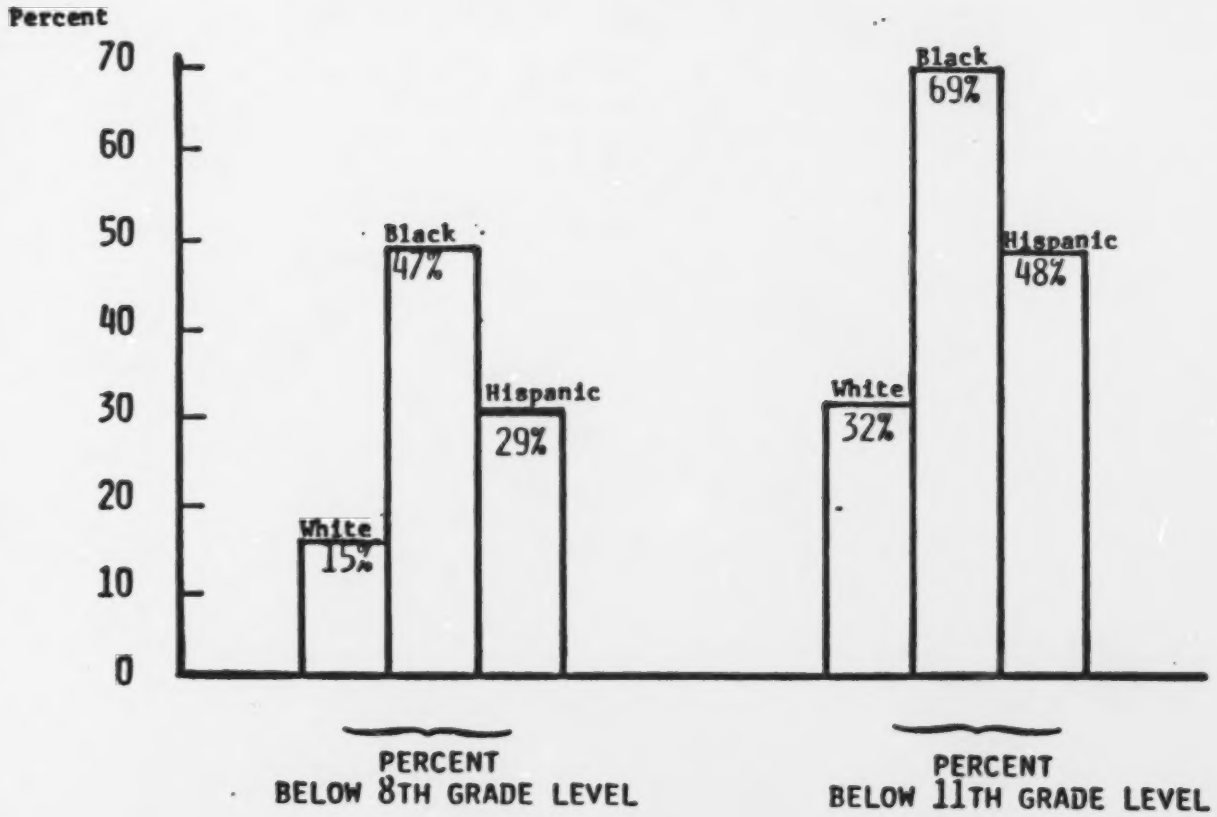
Characteristics of Dropouts

In the literature on youth's labor market experiences, there have been many investigations of the characteristics of graduates compared to dropouts.(25) While precise approaches and results differ among researchers, there are some general findings.

This research on dropouts has been plagued by an important methodological issue that has crucial policy implications. The problem is that that dropouts -- solely because they lack diplomas -- may be more susceptible to losing their jobs, and to having difficulties finding new ones. Alternatively, as suggested earlier, it may be that dropouts have characteristics -- such as poor attitudes -- that would lead to labor market problems even if they had diplomas. One of the most important findings implicit in the literature is that both problems seem to exist: there are differences among dropouts.

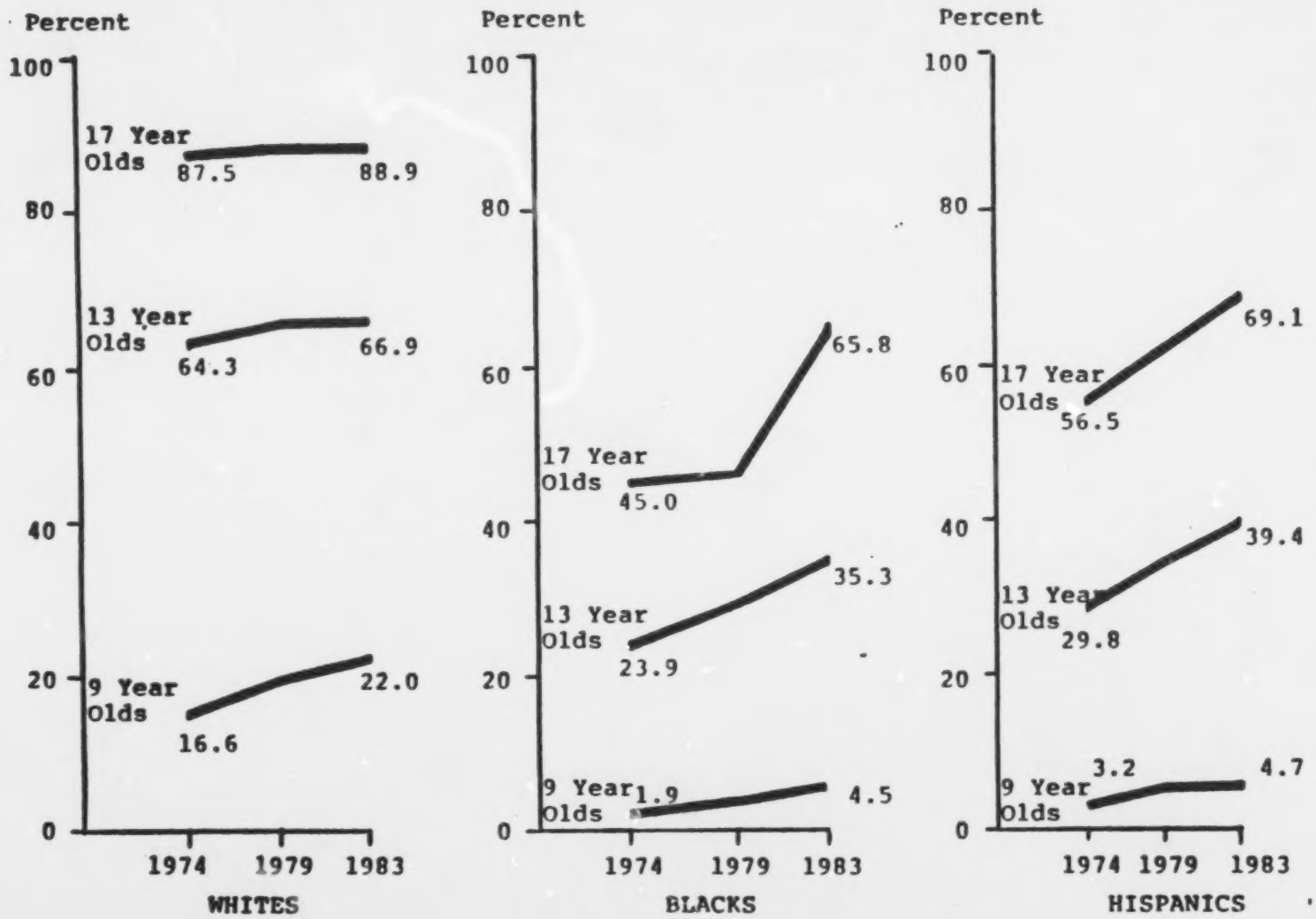
DIAGRAM 1

PERCENTAGES OF YOUNG ADULTS, AGE 21-25, WHO ARE BELOW AVERAGE READING PROFICIENCY OF (1) EIGHTH GRADERS AND (2) ELEVENTH GRADERS



Source: Irwin S. Kirsch, Literacy: Profiles of America's Young Adults, Final Report, National Assessment of Educational Progress, Educational Testing Service; Princeton, New Jersey, September 1986.

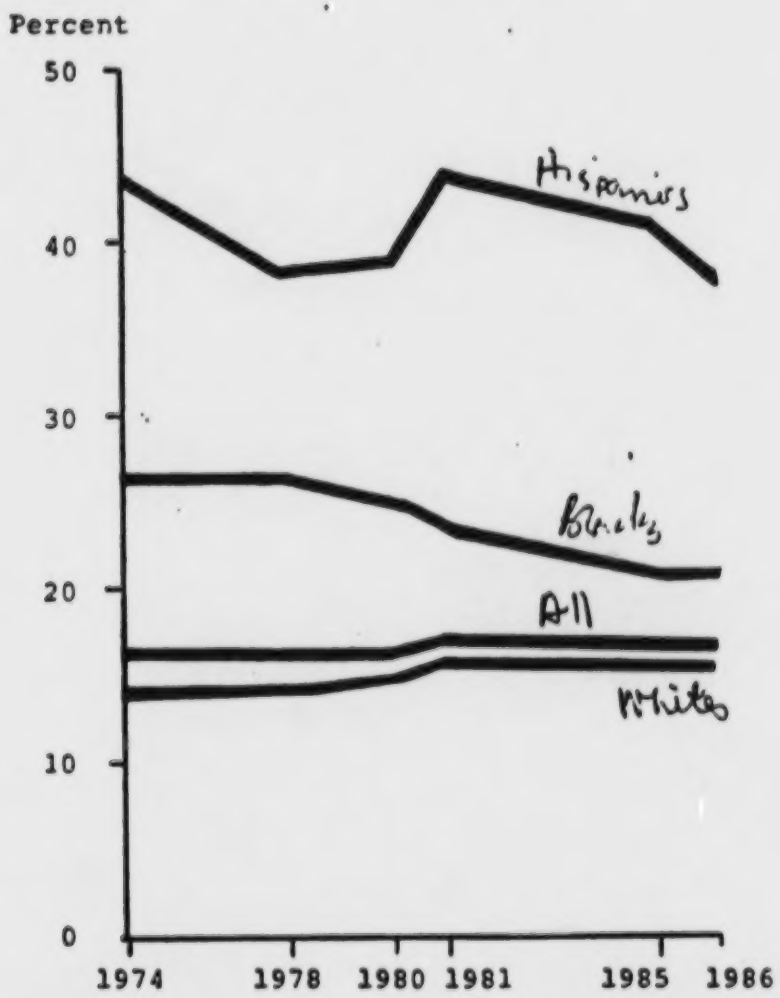
DIAGRAM 2. PROPORTIONS OF 9, 13, AND 17 YEAR OLDS WHO READ AT THE INTERMEDIATE LEVEL* BY RACE/ETHNICITY, 1974, 1979, AND 1983



* See text for definition of term.

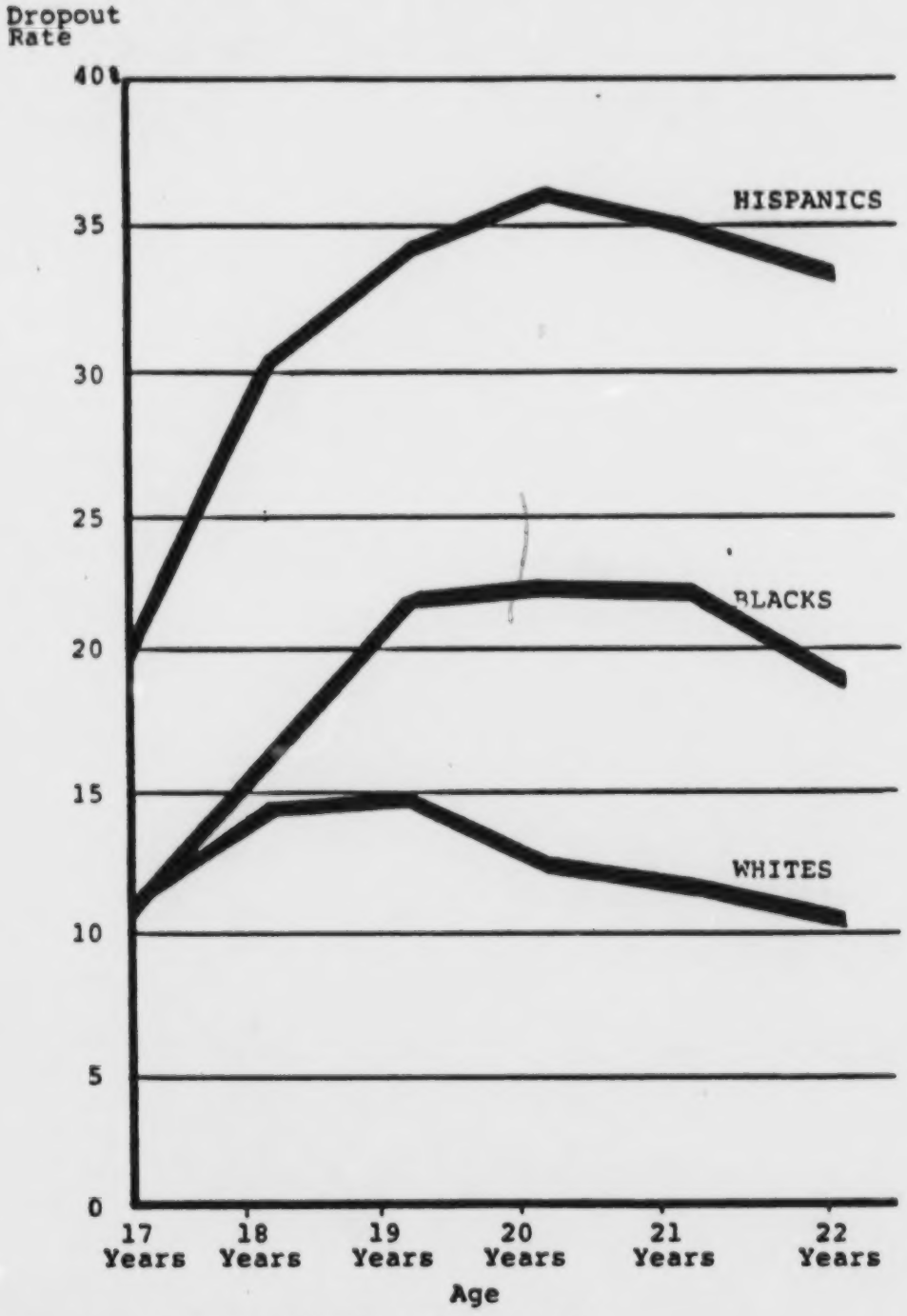
Source: National Assessment of Educational Programs, The Reading Report Card, Princeton, New Jersey: National Assessment of Educational Programs, Educational Testing Service, undated.

DIAGRAM 3. PERCENT OF 20 - 24 YEAR OLDS WITHOUT A HIGH SCHOOL DIPLOMA, 1974 - 1985 BY RACE AND ETHNICITY



Source: U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 274, Educational Attainment in the United States: March 1973 and 1974, U.S. Government Printing Office, Washington, D.C., 1974; No. 356, Educational Attainment in the United States: March 1979 and 1978, U.S. Government Printing Office, Washington, D.C., 1980; No. 390, Educational Attainment in the United States: March 1981 and 1980, U.S. Government Printing Office, Washington, D.C., 1984; U.S. Bureau of Labor Statistics, "Educational Attainment of Workers," February 1986, and August 1986.

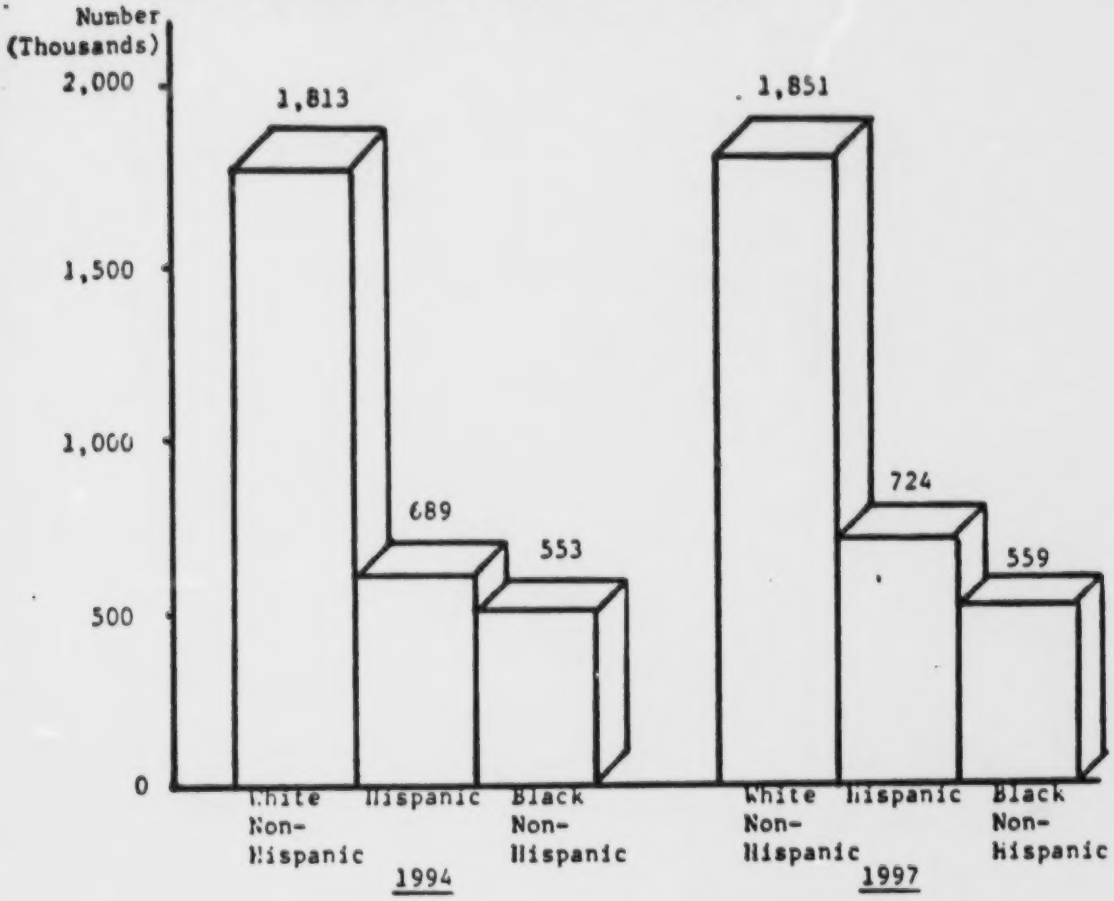
DIAGRAM 4. AVERAGE AGE-SPECIFIC DROPOUT RATES AMONG 17 - 22 YEAR OLDS BY RACE AND ETHNICITY



Source: Morgan, Figure 6.2, p. 230.

DIAGRAM 5

PROJECTED NUMBERS OF SCHOOL DROPOUTS, AGE 17 - 22
BY RACE AND ETHNICITY, 1994 - 1997*



*These figures were calculated by first projecting the number of white non-Hispanic, and Hispanic 17 to 22 year olds. Since 95 percent of Hispanics are white, the projected white non-Hispanic population was calculated by multiplying the projected Hispanic population by 0.95 and subtracting that figure from the projected white population. Since 5 percent of Hispanics are black, the same procedure was followed to calculate the black non-Hispanic population, using the 0.05 figure. The age-specific dropout rates shown in Diagram 4 were then applied to these population projections.

Sources: Middle Series, U.S. Bureau of the Census, Current Population Reports, Series P-25, Number 952, Projections of the Population of the United States by Age, Sex and Race: 1973 to 2060, U.S. Government Printing Office, Washington, D.C., May 1984; and Series P-25, Number 995, Projections of the Hispanic Population: 1983-2080, U.S. Government Printing Office, Washington, D.C, November 1986.

In broad terms, the characteristics of young people's families, the schools they attend, the areas in which they live, and youth's own attributes operate separately and in combination to affect how youth fare in school and their dropout status. During their schooling years, young people are "being educated" in several settings and their experiences in one setting -- such as within the family -- affect their experiences within another, such as the classroom.

Graduates and dropouts tend to have different types of home life. Dropouts are more likely than graduates to come from poor families, where either the mother or father is not in the home, and the parent who is there has not completed high school.(26) How such a family life affects young people can be gleaned from their own statements. For example, Hispanic students (who are more likely than white youth to live in low-income families and have parents without high school diplomas) are more likely than whites to report that the following adversely affects their school work: "worry over money problems," "lack of a good place to study," and "parents aren't interested in my education."(27)

But not all dropouts come from poor and unstable families and not all such families have children who are dropouts. Youth's own characteristics are also important to examine.

First, whether young people are white, black, or Hispanic is not important to their dropout behavior once other factors (such as their family backgrounds) likely to influence this action have been taken into account. Black youth have a lower probability of dropping out of school than whites and Hispanics are no different from whites. These findings indicate that the reasons for the high dropout rates among blacks and Hispanics (shown in Diagrams 3 and 4) are related to blacks' and Hispanics' higher probability of experiencing the other factors affecting the drop-out decision.(28)

Second, young men and women do not differ in their likelihoods of leaving school early. The reasons they offer for dropping out do differ: over a third of young women dropouts, but 5 percent of young men dropouts report that marriage or pregnancy was their reason for leaving school.(29)

Third, dropouts can be distinguished from graduates by their levels of academic achievement -- or basic skills -- and their "attitudes." To some extent these characteristics of youth can be separated; but to some extent, they are also interconnected.

Academic achievement is measured by the extent to which youth move from one grade level to the next, and by how well they progress in their learning, that is, by the letter grades they receive in subject areas. Viewed in this way, the process of education becomes a series of building blocks. For example, at early grade-levels, children learn how to read; they are tested on that skill and depending upon their scores, move to higher grade-levels. At higher grade levels, the same process occurs, only they are tested on knowledge of subject matter, which they acquire by using their previously gained reading skills.

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But students' academic achievement at every grade-level is influenced by their attitudes, and conversely their attitudes are influenced by their achievement. In part, these attitudes develop as a result of the schooling process. Students having difficulties learning can become frustrated; and in turn, past frustrations can reduce children's desire to learn. In part too, these attitudes develop as a result of experiences outside the school, within their families and neighborhoods, for example.(30)

In short, the process of becoming educated requires progress on (at least) two fronts simultaneously -- academics and attitudes.(31) School systems have long recognized this need; at early grade-levels students are often evaluated not only on the basis of their knowledge of subject matter, but also on the basis of their behavior and deportment in the classroom.

Poor academic achievement -- at least as early as the junior high school years -- is a characteristic of young people who become dropouts. After taking into account other factors which influence dropout behavior, youth who had low letter grades or had been retained in a particular grade-level a year or more, are more likely to dropout years later than either youth with higher letter grades or youth who had not been age-grade delayed.(32) Among young women, low levels of achievement are associated with subsequent marriage or pregancy as the reason given for dropping out.(33)

Youth's attitudes are similarly important. Young people who engaged in delinquent behavior in their early teen years -- or were disciplined by school authorities -- are more likely to become dropouts than those who were not delinquents or had not been disciplined. This finding holds after taking into account the separate effects of other influences on their dropout behavior, such as their achievement levels, and family income and education.(34)

This particular result regarding delinquent behavior in the early teen years is important for two reasons. First, delinquents are more likely to have poor relations with their families than nondelinquents. This particular finding highlights the critical nature of the connection between life inside and outside school.(35)

Second, youth who are both delinquents and dropouts appear to be a different group from those who are dropouts <u>but not</u> delinquents. Those with "attitude problems" at age 14 or 15 are likely to be the same ones who, several years later, have with the greatest difficulties connecting successfully with the job market.(36)

Because these dropouts are likely to have particular problems after they leave school, it is useful to try to estimate their numbers. This can be accomplished by assuming that the students with the "worst attitudes" (the most difficult delinquents) are those most likely to be suspended or expelled from school. Under this assumption, 10 to 11 percent of young male dropouts, and 2 to 5 percent of young female dropouts, can be categorized as having "attitude problems."(37) This could amount to around 200,000 of the approximately 3 million 20 to 24 year old dropouts.

IV. THE EFFECTS OF EDUCATION ON YOUTH'S LABOR MARKET EXPERIENCES

Failure to achieve any of the expected outcomes of education -- basic skills, employability skills or a high school diploma -- may subsequently affect a young person's labor market experiences in several ways. Compared to otherwise similar people, those with educational deficiencies may

- o have a higher probability of becoming unemployed;
- o once unemployed, take longer to find new work;
- o once employed, be more likely to lose their jobs;
- o once employed, have lower paying jobs (earn less per hour); or
- o have both less stable and lower paying jobs, resulting in lower earnings over the course of a year.

This section reviews the evidence on the labor market effects of having basic and employability skills and of having received a high school diploma.(38)

The Effects of Basic Skills and Employability Skills

Acquiring basic skills has a payoff in the labor market, especially for white and Hispanic youth. This finding is based on research that used AFQT scores as the measure of narrowly defined basic skills.

After taking into account youth's dropout status and other factors likely to influence their labor market experiences, white and Hispanic young men and women with higher levels of basic skills average (a) more weeks of work per year and (b) higher hourly wages than those with lower skill levels. The payoff to basic skills is not as strong among blacks. Again after controlling for other factors, young black women with higher levels of basic skills do not appear to work more weeks or earn more per hour than their counterparts with lower skill levels. Young black men with higher skill levels work more weeks per year than those with lower skill levels, but there is no apparent difference between the two groups' hourly wages.(39)

In general, students who had high letter grades in school are more likely to find jobs shortly after leaving school than those with low grades. But their successes in finding work do not appear to be due to greater levels of basic skills, as reflected in their grades. Employers tend not to ask for school transcripts when they are interviewing youth.(40) Rather, it seems likely that the same positive attitudes -- and high levels of motivation -- which led to good grades in school are being manifested in the young people's attempts to find work. They can be looking harder for jobs, making better impressions on potential employers, or both.

There is direct evidence that employers view proper attitudes as an important attribute in their hiring process. According to one survey, for jobs typically held by male high school graduates, more employers consider attitudes toward work (such as, dependability and being a good team member) -- rather than basic literacy -- as very important job qualifications.(41)

But positive attitudes and high levels of motivation do not appear to help inner city black youth find work. Among these young people, those with low grades are as likely as those with high grades to become employed. (42)

Once on the job, black youth with high and low grades appear to behave differently, and this difference explains one source of their joblessness. Inner-city black youth with low grades are more likely than those with high grades to have unexplained absences from work -- which is itself measure of attitudes. Moreover, absenteeism is associated with losing a job: youth who have frequent unexplained absences are more likely to be discharged by their employers than those with few such absences.(43)

This finding does not imply that discharges are a major reason why youth leave their jobs. Most job leaving is either voluntary on their part or it is due to layoffs.(44)

As young people age, those who had higher letter grades in school come to earn more per hour than those with lower grades, especially the women.(45) Whether grades are signalling higher levels of basic skills, or greater motivation, is not totally clear. For young women at least, to some extent, they are signalling the acquisition of basic skills. The types of occupations women typically hold -- secretarial and clerical -- require skills such as knowledge of correct spelling and grammar.(46) Women with greater proficiency in these areas have higher wage increases over time than those without such proficiency.

The particular employability skill -- occupation-specific commercial training while in school -- has a payoff to young women. Compared to young women who take few commercial courses in high school, those who train heavily in this area have higher annual earnings throughout the transition years. This difference in earnings is initially due to both higher hourly wages and a greater number of weeks worked per year. Over time, the higher average earnings' level of women with commercial training is due to a greater number of weeks worked per year; the advantage they had in hourly wages disappears.(47)

In the first few years after leaving school, young men who train intensively in the trade and industrial arts earn more per year than those who take few courses in this area. To some extent, this earnings' difference is due to higher wages; and to some extent, it is due to working more hours per week. Over time, however, the positive effects of training in the trade and industrial arts diminish: those who do not have this type of vocational background earn as much per year as their counterparts with it.(48)

A second component of employability skills is knowledge of the workings of the job market. There is evidence that youth have <u>some</u> understanding of the job search process. When looking for work, young people use many methods: they contact employers directly, ask friends and relatives, look at newspaper advertisements, and go to public and private employment agencies, among others.

Direct contact with employers is a method used by about two-thirds of unemployed young people -- males and females; whites, blacks and Hispanics; graduates and dropouts. This is one of the most effective ways to find work for people of all ages. But about a third of unemployed youth also look in newspapers -- a relatively ineffective way to find jobs. While asking friends and relatives about prospective employment opportunties is likely to have better payoffs than newspaper ads, roughly 20 percent of young people use this method. (Of course, asking friends and relatives about jobs is likely to be helpful only to the extent that they have useful information.)(49)

Youth appear to be unaware of the importance of references in job interviews with potential employers. Moreover, black youth seem to have fewer references than white youth.(50)

The Payoff to Basic Skills versus High School Diplomas

While the acquisition of basic skills has a payoff in the job market, the payoff to a diploma seems to be even greater. Shortly after leaving school, young men with diplomas earned $1600 more per year than otherwise similar dropouts; among women, graduates earned $1500 more. By comparison, "If dropouts were to increase their human capital [or level of basic skills], as measured by AFQT, to the same level of terminal graduates (a 20 point increment), for both males and females the resulting gain in earnings would be only about $700."(51) Similar results have been found where the test was for the effects of years of schooling verus IQ (which might be a proxy for having acquired basic skills) on the earnings of men 19-32 years of age.(52)

These findings are consistent with the view expressed earlier that a diploma represents more than acquisition of skills and can, in fact, operate as a signalling device to employers. Picking up on this signal, employers can come to view a diploma as a necessary credential for jobs. From an administrative standpoint, receipt of a diploma is also a relatively easy way to sort among job applicants. At least in large companies, jobs are often categorized according to the level of education they require -- less than a high school diploma, high school diploma, and college degree.(53) To the extent that (a) a high school diploma is an important determinant of hiring and layoff policies and (b) at the entry level, pay scales are associated more with jobs than workers, then a diploma can have its own separate effect both on young people's likelihood of finding jobs, losing jobs, and on the wages they earn.

The Effect of a High School Diploma

Solid empirical evidence on the ways in which a high school diploma affects the employment and unemployment experiences of youth has only begun to appear over the past few years. As recently as 1979, it was noted that

> ...high school dropouts tend to have much higher rates of unemployment than graduates; but after adjusting for other differences between the two groups, the relationship is less clearcut. While some research has indicated that a diploma raises the probability of obtaining a job, other studies have found it has no effect and still other studies have found that a high school diploma assists young white men but not members of other demographic groups.(54)

The labor market benefits of graduation from high school differ between young men and women. There may also be some differences between Hispanic and nonHispanic youth and between white and black young men, although the evidence is inconclusive.

For men there are clear economic payoffs to graduation. These payoffs begin the first year after they leave school, and continue through the transition years. Male graduates have fewer weeks of unemployment, earn more per hour, and have higher annual earnings than dropouts.(55)

For women the payoff to a diploma comes largely through longer periods of employment. In the first year after leaving school, women graduates have fewer weeks of unemployment, and they earn more per hour than their counterparts who have dropped out. A few years later, graduates continue to earn more per year than nongraduates because they have more weeks of employment than those who have dropped out. Graduates no longer earn more per hour than their nongraduate counterparts.(56)

One of the reasons for dropouts' shorter periods of employment and longer periods of unemployment appears to be their greater susceptibility to losing their jobs. As dropouts gain experience in the job market, both their turnover rates and their likelihood of involuntary separations decline. Nevertheless, dropouts remain more susceptible than graduates to losing their jobs. For most dropouts, this job loss is due to layoffs -- reasons beyond their control; but approximately 10 percent of dropouts who lose their jobs have been discharged "for cause."(57)

While women graduates fare better in the job market than their counterparts who are dropouts, on average, women graduates fare less well than male dropouts. The young women do experience less unemployment, and about the same number of weeks of employment as male dropouts. However, their average hourly wages, and thus their average yearly earnings, are below those of the men.(58) A major reason for the differences between men and women appears to be in the types of jobs the two groups tend to hold. Occupations in which women are concentrated pay less than those in which men are concentrated.(59)

As indicated above, there may be differences among race and ethnic groups in the payoffs to a diploma. In particular, unlike whites, black and Hispanic graduates may be as susceptible to losing their jobs as their counterparts who are dropouts.(60) The precise reasons for these differences are not clear, in part because the data on which they are based were collected in the early 1980s -- when the national unemployment rate was beginning to rise. It may be that minority group youth are concentrated in occupations and industries which were especially affected by the downturn in the economy.(61)

V. SUMMARY AND CONCLUSIONS

This review of the literature has identified particular areas that merit closer examination in public policy discussions of the linkages between youths' education and their labor market experiences. This section summarizes the areas of concern. Subsequent work by the National Commission for Employment Policy will investigate the policy implications of the findings of this paper and other education/labor market research.

The years between age 16 and 22 are termed the "transition years." At age 16 youth begin to leave school (legally) and enter the workforce. By age 22, young people have typically completed their formal education and are developing work- and life-style patterns characterized as "adulthood."

Most youth go through these years successfully. But some have difficulties finding and keeping jobs, and they earn low wages for workers their age. Most of these "at risk" youth are located in the Nation's inner cities and rural areas.

In large measure, young people's labor market successes and problems have their roots in the youth's childhood experiences. A series of successes when young -- good family relations and positive schooling experiences -- leads to people who are well prepared academically and emotionally for the transition years. A series of problems when young -- difficulties at home or in school -- leads to people who lack the reservoir of knowledge necessary for successful transition into adulthood.

Some of the at-risk youth left their childhood years without high school diplomas; others left without having learned the basic skills; still others left without having developed the "attitudes" consistent with being productive members of society or of the workforce. "Poor attitudes" may mean anti-social behavior; ignorance about the behavior expected of them; or low expectations for the future, and with those expectations, a lack of motivation. Some have a combination of these problems.

There are a few rough estimates of the numbers of young people with these various difficulties. About 3 million 20 to 24 year olds in 1986 did not have diplomas or GEDs. Among them, about 200,000 may have attitudinal problems that result in anti-social behavior. Basic skills deficiences are likely to be a problem for 4.4 million 21 to 25 year olds who read below the 8th grade level in 1985; for another 3.3 million who read below the 11th grade level, and for some 600,000 17 year olds who, in 1983, did not read at a level of proficiency suggesting "an ability to search for specific information, interrelate ideas, and make generalizations."

In recent years the Nation has expressed a commitment to improving the basic skill level of youth likely to be "at risk" when they enter the labor market. This commitment is an important step in enhancing their prospects for the future.

The extent to which these young people's basic skills will be improved depends in part upon adults' recognition that youths' acquisition of these skills goes hand-in-hand with their attitudinal development. To some extent, low grades in school reflect difficulties learning; but to some extent they also reflect a lack of motivation. Finding ways to motivate young people to learn is a critical part of assuring they do learn.

Youth whose attitudes are manifested in anti-social behavior are another area of concern. These young people may have deep-seated problems. In any case, their attitudes impinge upon their schooling; and as a consequence, it is probable that these young people will also have neither basic skills nor diplomas.

At-risk youth also need to understand what employers expect in job interviews, and on the job. To some extent they may be ignorant of proper behavior, rather than intent on negligent behavior. The number of youth who need assistance in this area is not known, but there are insititutions and programmatic structures which can help them, for example schools and programs funded under JTPA.

Reducing the school dropout rate among minorities is a major way to improve their prospects in the labor market. This is important for several reasons. Hispanics and blacks have dropout rates well above those of whites and they are disproportionately represented among youth having difficulties in the job market. In addition, employers seem to use diplomas as signalling devices that youth have good attitudes and some level of basic skills; and a diploma is a prerequisite for many jobs and for additonal education.

Reducing the school dropout rate requires policies that incorporate youth's development of basic skills, attitudes, and knowledge of expected behavior in the workplace. By doing so, such policies would take into account the differences among potential dropouts. Some potential dropouts may not understand the importance of a high school diploma; others may be doing poorly in school, in some cases, because they are not motivated to learn and, in other cases, because the material is difficult for them. Still others have the severe attitudinal problems, mentioned above, that result in disruptive and anti-social behavior.

Moreover, actions to prevent students from dropping out can usefully begin well before young people reach age 16. It is possible to identify youth -- at least as early as in their junior high school years -- who are likely candidates for being at-risk in the education system, and later on, at-risk in the job market.

END NOTES

1. The diversity of needs among displaced workers is discussed in National Commission for Employment Policy, 11th Annual Report, Washington, D.C.: National Commission for Employment Policy, 1986.

2. For example, see National Commission for Employment Policy, Expanding Employment Opportunities for Disadvantaged Youth, Fifth Annual Report, Washington, D.C.: National Commission for Employment Policy, December 1979; Freeman, Richard B. and David Wise (eds.), The Youth Labor Market Problem, Chicago: University of Chicago Press, 1982; Lerman, Robert I., The Nature of the Youth Employment Problem, Technical Analysis Paper No. 69, Washington, D.C.: U.S. Department of Labor, March 1980; Adams, Arvil V. and Garth L. Mangum, The Lingering Crisis of Youth Unemployment, Kalamazoo, Michigan: W.E. Upjohn Institute for Employment Research, 1978.

3. Taggart, Robert, "Solving the Basic Skills Crisis," Testimony presented before the Committee on Labor and Human Resources, U.S. Senate, Washington, D.C., January 14, 1987.

4. National Commission for Employment Policy, Computers in the Workplace: Selected Issues, Report No. 19, Washington, D.C.: National Commission for Employment Policy, March 1986.

5. McPartland, James M.; Russell Dawkins, and Jomills H. Braddock II, "The School's Role in the Transition from Education to Work: Current Conditions and Future Prospects," Report No. 362, Baltimore, Maryland: Center for Social Organization of Schools, The Johns Hopkins University, April 1986; and Ballen, John and Richard Freeman, "Transitions between Employment and Nonemployment," in Freeman, Richard B. and Harry J. Holzer (eds.), The Black Youth Employment Crisis, Chicago: University of Chicago Press, 1986.

6. National Commission for Employment Policy, December 1979; Culp, Jerome and Bruce H. Dunson, "Brothers of a Different Color: A Preliminary Look at Employer Treatment of White and Black Youth," in Freeman and Holzer (ed.).

7. For example, see Morgan, William R., "The High School Dropout in an Overeducated Society," in Pathways to the Future, Vol. IV, Columbus, Ohio: Center for Human Resource Research, February 1984; Rumberger, Russell W. and Thomas N. Daymont, "The Economic Value of Academic and Vocational Training Acquired in High School," in Youth and the Labor Market, Michael E. Borus (ed.), Kalamazoo, Michigan: The W.E. Upjohn Institute for Employment Research, 1984; National Commission for Employment Policy, The Federal Role in Vocational Education, Report No. 12, Washington, D.C.: National Commission for Employment Policy, September 1981; and Bloom, Howard and Maureen McLaughlin, "CETA Training Programs--Do They Work For Adults," Washington, D.C.: Joint Study of the Congressional Budget Office and the National Commission for Employment Policy, July 1982.

8. For discussions of the educational process, see Chall, Jeanne S., Stages of Reading Development, New York: McGraw-Hill Book Company, 1983; and Walberg, Herbert, "Improving the Productivity of America's Schools," Educational Leadership, Vol. 41, No. 8 (May 1984), pp. 19-30.

9. The AFQT is a normative test designed to be administered to military personnel; it measures predetermined ability, enrichment experiences outside the school as well as achievement within the school. Data on both

AFQT and prose test scores exist for nationally representative samples of youth. AFQT scores are in the National Longitudinal Surveys of Youth; scores on prose tests are in the National Assessment of Educational Progress Young Adult Literacy Assessment. IQ scores are used in Kiker, B.F. and C.M. Condon "The Influence of Socioeconomic Background on the Earnings of Young Men, Journal of Human Resources, Vol. XVI, No. 1, (Winter 1981) pp. 94-105.

10. See data in the National Bureau of Economic Research project, Inner-City Black Youth in Freeman, and Holzer (eds.). Grades and several measures of aptitude and ability are in data from the Youth in Transition Project, begun in 1965; for example, see Bachman, Jerald G., Swayzer Green and Ilona D. Wirtanen, Dropping Out - Problem or Symptom?, Youth In Transition, Volume III, Ann Arbor, Michigan: Institute for Social Research, University of Michigan, 1971.

11. Measures of delinquency and illegal activities are found in the National Surveys of Youth, the Youth in Transition Project, and the National Bureau of Economic Research project on inner city black youth; data on absenteeism are in the inner city black youth project of the National Bureau of Economic Research.

12. Kohen, Andrew and Herbert H. Parnes, "Occupational Information and Labor Market Status: The Case of Young Men," Journal of Human Resources, Vol. XV, No. 2 (Winter 1975), pp. 44-55.

13. Culp and Dunson; Wielgosz, John and Susan Carpenter, "The Effectiveness of Job Search and Job Finding Methods of Young Americans," in Pathways to the Future, Vol IV., Columbus, Ohio: Center for Human Resource Research, February 1984; and Borus, Michael, Choongsoo Kim, and Richard Santos, "Job Search Activities of Youth," in Pathways to the Future, Vol. I, Columbus, Ohio: Center for Human Resource Research, May 1981.

14. While States are developing minimum requirements for graduation, no investigation appears to have been undertaken that estimates the extent to which graduates meet these requirements, while dropouts do not.

15. Venezky, Richard L., Carl F. Kaestle, and Andrew M. Sum, The Subtle Danger: Reflections on the Literacy Abilities of America's Young Adults, Report No. 16-CAEP-01, Princeton, New Jersey: Center for the Assessment of Educational Progress, Educational Testing Service, January 1987.

16. Bachman et al; Taggart.

17. Bachman et al; Borus, Michael E. and Susan Carpenter, "Choices in Education" in Borus (ed).

18. Crowley, Joan E., "Delinquency and Employment," in Borus (ed.); Bachman et al; Jackson, Peter and Edward Montgomery, "Layoffs, Discharges, and Youth Unemployment," in Freeman and Holzer (eds.); Ferguson, Ronald and Randall Filer, "Do Better Jobs Make Better Workers? Absenteeism from Work Among Inner-City Black Youth," in Freeman and Holzer (eds.).

19. One reason for the differences may lie in data collection procedures. See the discussions in Hammack, Floyd Morgan, "Large School Systems' Dropout Reports: An Analysis of Definitions, Procedures, and Findings," Teachers College Record, Vol. 87, No. 3 (Spring 1986), pp. 324-341; U.S. General Accounting Office, "School Dropouts: The Extent and Nature of the

Problem," Washington, D.C.: U.S. General Accounting Office, June 1986; and Lyke, Bob, "High School Dropouts Updated 6/17/86," Washington, D.C.: Education and Public Welfare Division, Congressional Research Service, June 1986.

20. Kirsch, Irwin and Ann Jungeblut, Literacy: Profiles of America's Young Adults, Report No. 16-PL-01, Princeton, New Jersey: National Assessment of Educational Progress, Educational Testing Service, 1986.

21. National Assessment of Educational Progress, The Reading Report Card: Progress Toward Excellence in Our Schools, Princeton, New Jersey: National Assessment of Educational Progress, 1986, p. 15.

22. National Assessment of Educational Progress, p. 15.

23. Young people who return to school to acquire a GED tend to be younger, come from higher (rather than lower) income families and they tend not to have been behind age-grade delayed while in school. Borus and Carpenter.

24. Based on the trends shown in Diagram 3, this seems to be a reasonable assumption for whites and Hispanics; it may overstate the number of blacks likely to become dropouts.

25. This review highlights findings from labor market research; subsequent Commission work will examine the issue of dropping out from an educational perspective.

26. For example, see Borus and Carpenter; Fligstein, Neil and Roberto Fernandez, "Educational Transitions of Whites and Mexican-Americans," in Hispanics in the U.S. Economy, George Borjas and Marta Tienda (eds.), Orlando, Florida: Academic Press, 1985.

27. Brown, George H., Nan Rosen, Susan T. Hill, and Michael Olivas, Condition of Education for Hispanic Americans, Washington, D.C.: National Center for Education Statistics, February 1980.

28. For example, see Borus and Carpenter.

29. Borus and Carpenter; Morgan.

30. See also the discussion in Mizell, M. Hayes, "First Steps: Considerations Preliminary to the Development of Dropout Prevention Policies and Programs," Columbia, South Carolina: Youth Employment Coordinating Council, State of South Carolina, August 1986.

31. It is recognized that other characteristics of youth, such as their health, are important to the learning proces. However, consideration of these other aspects is beyond the scope of this paper.

32. Other factors taken into account include, for example, family background, disciplinary problems, and scores on standardized tests that assess the students' levels of performance in tasks requiring the application of (narrowly defined) basic skills. See Bachman et al; Taggart; Borus and Carpenter; Fligstein and Fernandez; Mizell.

33. Taggart.

34. Bachman et al; Borus and Carpenter; Mizell.

35. Bachman, Jerald G., The Impact of Family Background and Intelligence on Tenth-Grade Boys, Youth In Transition, Vol. II, Ann Arbor, Michigan: Survey Research Center, University of Michigan, 1970; Crowley.

36. Bachman et al; Crowley.

37. Measures of the number of dropouts who were suspended or expelled can be gleaned only from youth's own reports and there are problems with interpreting the statements they make. The "true" reason(s) they left school may differ from those they actually report. For example, young people who state "left for financial reasons" may have left school in response to a real family crisis; alternatively, they may have had poor grades and found work to be an attractive alternative to schooling. Given these difficulties interpreting the data, it is noteworthy that two independent national surveys of youth indicate roughly the same proportions of dropouts due to suspension or expulsion. See Morgan; and General Accounting Office.

38. Two types of research have findings in this area. There are investigations of data from surveys of youth which typically use statistical techniques, such as regression analysis. These techniques identify the separate effects of youth's characteristics -- such as being female, a high school graduate, and having good attitudes toward work -- on, for example, their wages. Other investigations, such as those of surveys of employers, provide descriptive information, given in the form of cross-tabulations.

39. Morgan. Cross-tabular data using differences in scores on a prose test are given in Venezky et al. These data indicate that among youth with 12 or fewer years of schooling, those who scored higher on the test were less likely to be unemployed, more likely to be employed; and on the job, they averaged higher hourly wages than those with lower scores.

40. Bishop, John, "Basic Skills and Worker Productivity," Paper presented at the Symposium, "NIE Research Findings on Education and Employment and Their Implications for Policymakers and Practitioners," Washington, D.C., November 18-19, 1985.

41. McPartland et al. See also Ballen and Freeman; National Commission for Employment Policy, December 1979.

42. Ballen and Freeman.

43. Ferguson and Filer; Jackson and Montgomery.

44. Less than 10 percent of job losses among youth are due to involuntary discharges. Shapiro, David, "Youth Employment Patterns and Job Turnover," Pathways to the Future, A Report on the National Longitudinal Survey of Youth Labor Market Experience in 1979, Columbus, Ohio: Center for Human Resource Research, May 1981.

45. Bishop.

46. For example, see Pullman, Cydney and Sharon Szymanski, The Impact of Office Technology on Clerical Worker Skills in the Banking, Insurance and Legal Industries in New York City: Implications for Training, A Study for the Private Industry Council of New York City, New York: Technology Policy Project, The Labor Institute, August 1986.

47. Meyer, Robert, "An Economic Analysis of High School Education," in The Federal Role in Vocational Education: Sponsored Research, Special Report No. 39, Washington, D.C.: National Commission for Employment Policy, November 1981. This finding is similar to that found for the effects on women's earnings of federally sponsored training programs prior to JTPA. Training increased women's earnings (compared to otherwise similar women without training) primarily because of greater employment, rather than higher hourly wages, as shown in Bloom and McLaughlin. See also Rumberger and Daymont.

48. Meyer.

49. Wielgosz and Carpenter; Borus et al; Culp and Dunson.

50. Culp and Dunson.

51. Morgan, p. 250.

52. Kiker and Condon.

53. Mallzio, Andrew G. and Douglas R. Whitney, "Educational Credentials in Employment: A Nationwide Survey," Research Brief, Washington, D.C.: Office on Educational Credit and Credentials, American Council on Education, May 1985.

54. National Commission for Employment Policy, December 1979, p. 58.

55. D'Amico, Ronald and Paula Baker, "The Nature and Consequences of High School Employment," Pathways to the Future, Volume IV, A Report on the National Longitudinal Surveys of Youth Labor Market Experience in 1982, Columbus, Ohio: Center for Human Resource Research, February 1984; and Morgan.

56. D'Amico and Baker; Morgan. This finding is similar to that discussed previously for the effects on women's earnings of commercial vocational education and federally sponsored training programs prior to JTPA.

57. Shapiro; Jackson and Montgomery.

58. Morgan.

59. There is strong evidence that this lower pay is associated with the occupations and not with the women; research has documented that women in typically male jobs earn more than otherwise similar women in typically female jobs. See Jusenius, Carol L., "The Influence of Work Experience and Typicality of Occupational Assignment on Women's Earnings," in Dual Careers, Vol IV. R&D Monograph 21, Washington, D.C.: Employment and Training Administration, U.S. Department of Labor, 1976.

60. Morgan; Jackson and Montgomery.

61. See also, DeFreitas, Gregory, "A Time Series Analysis of Hispanic Unemployment," Journal of Human Resources, Vol. XXI, No. 1, (Winter 1986), pp. 24-43.